Final

Meeting Minutes Transmittal/Approval
Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units
740 Stevens Center, Room 1200, Richland, Washington
April 28, 1993

FROM/APPROVAL: Eric Goller Date 5/26/93
Eric D. Goller, 100 Area Unit Manager, RL (A5-19)

APPROVAL: T. D. A. Wooley for Date 5/26/93
Jack W. Donnelly, 100 Aggregate Area Unit Manager, WA Department of Ecology

APPROVAL: Dennis Faulk Date 5-26-93
Dennis Faulk, 100 Aggregate Area Unit Manager, EPA (B5-01)

Meeting Minutes are attached. Minutes are comprised of the following:

Attachment #1	-	Meeting Summary
Attachment #2	-	Attendance Sheet
Attachment #3	-	Agenda
Attachment #4	-	Action Item Status List
Attachment #5	-	DSIs Transmitting Validated Data
Attachment #6	-	100 Area Operable Units Summary April 1993
Attachment #7	-	Proposal for Co-Disposal Treatability Test
Attachment #8	-	TPA Milestone M-30-05
Attachment #9	-	100 Area Treatability Tests Summary and Schedule
Attachment #10	-	Focused Groundwater Sampling in the 100 Area

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Prepared by: Kay Kimmel Date: 5/26/93
Suzanne Clarke, Kay Kimmel, GSSC (A4-35)

Concurrence by: Date: 5/26/93
Bob Henckel, WHC Coordinator (H6-02)

Attachment #1
Meeting and Summary of Commitments and Agreements

Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units
April 28, 1993

1. **SIGNING OF THE MARCH 100 AREA UNIT MANAGER'S MEETING MINUTES** - Minutes were reviewed and approved with no changes.

2. **ACTION ITEM UPDATE: (See Attachment 4 for complete status, items listed below indicate the update to Action Items made during the meeting):**

   1AAMS.9 No additional information.

   1AAMS.15 No additional information.

   1AAMS.16 No additional information.

3. **NEW ACTION ITEMS:** No new action items were initiated this month.

4. **INFORMAL TRANSMITTALS:** The following documents were informally transmitted to the Regulators:

   - Validated data (see attachment #5 for the transmittal letters):
     - *Data Validation Report for the 100-KR-1 Operable Unit Effluent Trench*, rev. 0
     - *Data Validation Report for the 100-KR-1 Operable Unit Effluent Crib*, rev. 0
     - *Data Validation Report for the 100-KR-1 Operable Unit Non-Intrusive Samples*, rev. 0
     - *Data Validation Report for the 100-KR-1 Operable Unit Retention Basin*, rev. 0
     - *Data Validation Report for the 100-DR-1 Operable Unit Sodium Dichromate Tanks*, rev. 0
     - *Data Validation Report for the 100-DR-1 Operable Unit Underwater Test Facility*, rev. 0
     - *Data Validation Report for the 100-DR-1 Operable Unit 108-D Office Building*, rev. 0
     - *Data Validation Report for the 100-NR-1 Operable Unit Soil Samples*, rev. 0

   - Sampling depth data on 100-KR-1 and 100-DR-1 were provided by Naik Naiknimbalkar.

   - Investigation Derived Waste logs.

5. **100 AREA ACTIVITIES:**

   - Attachment #6 was provided for general information on the 100 Areas Operable Units.

   - Co-Disposal - Jim Fields presented the concept of co-disposal of wastes (see attachment #7) as a potential treatability test, with many possible applications, which could reduce or consolidate the amount of waste. Steve Phillips provided slides of some of the equipment currently available on the site as well as some equipment being purchased. He noted that this particular waste minimization concept is DOE complex wide.

- Milestone 30-05 - Robert E. Peterson presented an update of activities being performed to fulfill the M-30-05 Milestone (see attachment #8). A data acquisition plan has been completed and is currently in WHC review clearance process. Eric Goller agreed to a Regulator/RL concurrent review.

- Treatability Study Status: Joan Woolard discussed the status of the 100-Area Treatability Studies (see attachment #9).

- Preliminary Bench-Scale Treatability Test Results: Jim Field presented very preliminary results from bench-scale tests performed at PNL to support the treatability tests. A schedule of planned activities is included in Attachment #9.

- 100-HR-3 Groundwater Treatability Test: Jim Duncan presented the results of initial biodenitrification bench-scale treatability tests.

- Revised Sampling and Analysis Strategy for 100-HR-3 and 100-BC-5: Steve Vukelich provided the proposed reduced analyte list for the various 100 areas (see Attachment #10). Additional text will be provided to RL, EPA and Ecology concerning the flowchart provided in the handout. A meeting is tentatively scheduled for Thursday May 6, 1993 in the afternoon to discuss the reduced analyte lists.

- 100 Area Feasibility Study: Fred Roeck provided the status of the revised FS.

6. AGREEMENTS:

- Verbal agreement was provided by Larry Gadbois of EPA that the waste container storage area be moved to a fenced area. The Waste Control Plan will be revised to reflect this change and available for signature by Unit Managers at the May UMM.

100 Aggregate Area Unit Manager's Meeting
Official Attendance Record
April 28, 1993

Please print clearly and use black ink

PRINTED NAME	ORGANIZATION	O.U. ROLE	TELEPHONE
KAY KIMMEL	DAMES & MOORE	GSSC To RL	376-1985
Suzanne Clarke	Dames & Moore	GSSC to RL	376-8187
Eric Goller	RL	100 Area Unit Mgr	376-7326
Ted Wooley	Ecology	UM	736-3012
JOAN WOOLARD	WHC	Treatability Studies	376-2539
Diana Sickle	WHC	ER Program	372-3141
Brad Foley	DOE-RL	100-NR-1 & 100-NR-2	376-7087
CHUCK CLINE	ECOLOGY	O.U. Mgr. Hydrogeo Support	(206) 438-7556
Larry Gadbois	EPA	O.U. manager	376-9884
Pamela Innis	EPA	O.U. Manager	376-4919
Ellen Dagun	DOE-RL	Waste Min	376-3811
Brian Frost	USGS	EPA Support	206-593-6510
Alan D. Krug	WHC	100 NR-1	376-5634
Sandra Stubiecki	PRC	EPA Support	(206)624-2692
Jim Field	WHC	Treatability Studies	376-3753
STEVE VUKELICH	WHC	100 HR-3	376-5158
Dennis FAULK	EPA	Unit Manager	6-8631
Paul Beaver	EPA	UM	6-8665
Bob Peterson	WHC-GeoSciences	M-30-05/Graduate	376-5858
DAVID MYERS	IT CORP	LFI Support	943-6728
Tom JONES	PNL	[illegible]	375-2710
RP HENCKEL	WHC	100 AREA	509 376-2091
JB DUNCAN	WHC	100 Area	509-372-0896

Attachment #3
Agenda

Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units
April 28, 1993

100 Area General Discussions

- **Co-disposal** - Steve Phillips/Jim Field
- **M-30-05** - Robert E. Peterson
- **Treatability Studies**
  - **100-HR-1 Excavation Treatability Study** - Joan Woolard
  - **Soil Washing Treatability Study** - Jim Field
  - **100-HR-3 Treatability Study** - Jim Duncan
  - **GW Operable Unit Contaminants** - Steve Vukelich

Operable Unit Status - Questions - Naiknimbalkar/Ayres/ Krug/Vukelich/Roberts/Kytola

Action Item Status

Attachment #4

Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units
April 28, 1993

Action Item Status List

ITEM NO.	ACTION	STATUS
1AAMS.9	DOE shall send a letter to Ecology, suggested from S. H. Wisness to D. Jansen with a cc. to EPA, explaining what is included in the ER Program for the N Reactor Area and how the multiple programs will be handled organizationally. Action to J. D. Goodenough (2/27/92). Action: E. D. Goller (5/27/92).	Open. Related to the N Areas Issues Papers. No answer 7/29/92. No additional information (8/26/92). On General Topics Agenda for October (9/23/92). No new information (4/28/93).
1AAMS.15	Provide response to April 2 EPA letter concerning river seeps. Action: Eric Goller (RL) 7/29/92.	Open (7/29/92). In DOE for transmittal (8/26/92). No additional information (4/28/93).
1AAMS.16	DOE should transmit Revision 1 of M-30-01.	Open (7/29/92). In DOE for transmittal (8/26/92). No additional information (4/28/93).

DON'T SAY IT --- *Write It!*

DATE: April 28, 1993

TO: Jack Donnelly, Ecology Kennewick
Paul Beaver, EPA B5-01

FROM: Eric Goller, RL A5-19
Telephone: 376-7326

cc: Jim Patterson, WHC H6-27 (w/o atts.)
Bob Henckel, WHC H6-02 (w/o atts.)
Alan Krug, WHC H6-02 (w/o atts.)
Bob Scheck, D&M G1-01 (w/o atts.)
Kay Kimmel, D&M G1-01 (w/o atts.)

SUBJECT: 100-DR-1 OU LFI SOURCE INVESTIGATION VALIDATED DATA

Attached please find three documents reporting validated data summaries from the 100-DR-1 OU LFI source investigations. The three document titles and WHC identification numbers are:

1. WHC-SD-EN-TI-143 Data Validation Report for the 100-DR-1 Operable Unit Sodium Dichromate Tanks, rev. 0.

2. WHC-SD-EN-TI-144 Data Validation Report for the 100-DR-1 Operable Unit 1724-DA Underwater Test Facility, rev. 0.

3. WHC-SD-EN-TI-146 Data Validation Report for the 100-DR-1 Operable Unit 108-D Office Building, rev. 0

Please feel free to contact me with any comments or questions regarding these documents. In addition, comments or questions regarding the technical elements of these documents can be directed to Bob Henckel (376-2091) or Alan Krug (376-5634).

DON'T SAY IT --- *Write It!*

DATE: April 28, 1993

TO: Jack Donnelly, Ecology Kennewick
Larry Gadbois, EPA B5-01

FROM: Eric Goller, RL A5-19
Telephone: 376-7326

cc: Jim Patterson, WHC H6-27 (w/o atts.)
Bob Henckel, WHC H6-02 (w/o atts.)
Alan Krug, WHC H6-02 (w/o atts.)
Bob Scheck, D&M G1-01
Kay Kimmel, D&M G1-01 (w/o atts.)

SUBJECT: 100-KR-1 OU LFI SOURCE INVESTIGATION VALIDATED DATA

Attached please find four documents reporting validated data summaries from the 100-KR-1 OU LFI source unit and vadose zone investigations. The four document titles and WHC identification numbers are:

1. WHC-SD-EN-TI-148 Data Validation Report for the 100-KR-1 Operable Unit Effluent Trench, rev. 0.

2. WHC-SD-EN-TI-149 Data Validation Report for the 100-KR-1 Operable Unit Effluent Crib, rev. 0.

3. WHC-SD-EN-TI-150 Data Validation Report for the 100-KR-1 Operable Unit Non-Intrusive Samples, rev. 0.

4. WHC-SD-EN-TI-151 Data Validation Report for the 100-KR-1 Operable Unit Retention Basin, rev. 0.

Please feel free to contact me with any comments or questions regarding these documents. In addition, comments or questions regarding the technical elements of these documents can be directed to Bob Henckel (376-2091) or Alan Krug (376-5634).

DON'T SAY IT --- *Write It!*

DATE: April 28, 1993

TO: Pamela Innis, EPA B5-01
Jack Donnelly, Ecology Kennewick
Steve Cross, Ecology Lacey

FROM: Bryan L. Foley A5-19

Telephone: 376-7087

cc: Jim Patterson, H6-27 (w/o atts.)
Bob Henckel, WHC H6-02 (w/o atts.)
Steve Vukelich,WHC H6-02 (w/o atts.)
Alan Krug, WHC H6-02 (w/o atts.)
Bob Scheck, D&M G1-01 (w/o atts.)

SUBJECT: Transmittal of Validated Sampling Data for the 100-NR-2 OU

Attached please find the data validation report for the 100-NR-2 Operable Unit Soil Samples (WHC-SD-EN-TI-140).

Please contact me if you have any questions, concerns or comments regarding this data report. Please note that I have assumed responsibility as the DOE-RL lead for both 100-NR-1 and 100-NR-2 operable units from Eric Goller. I am assigned to the Environmental Remediation Branch of DOE-RL's Environmental Restoration Division. I look forward to working with you in our continuing joint efforts to restore the Hanford Site.

UNIT MANAGER'S MEETING

100 Area Operable Units Summary
April 1993

100-BC-1 SOURCE OPERABLE UNIT
WORK SUMMARY
April 19, 1993

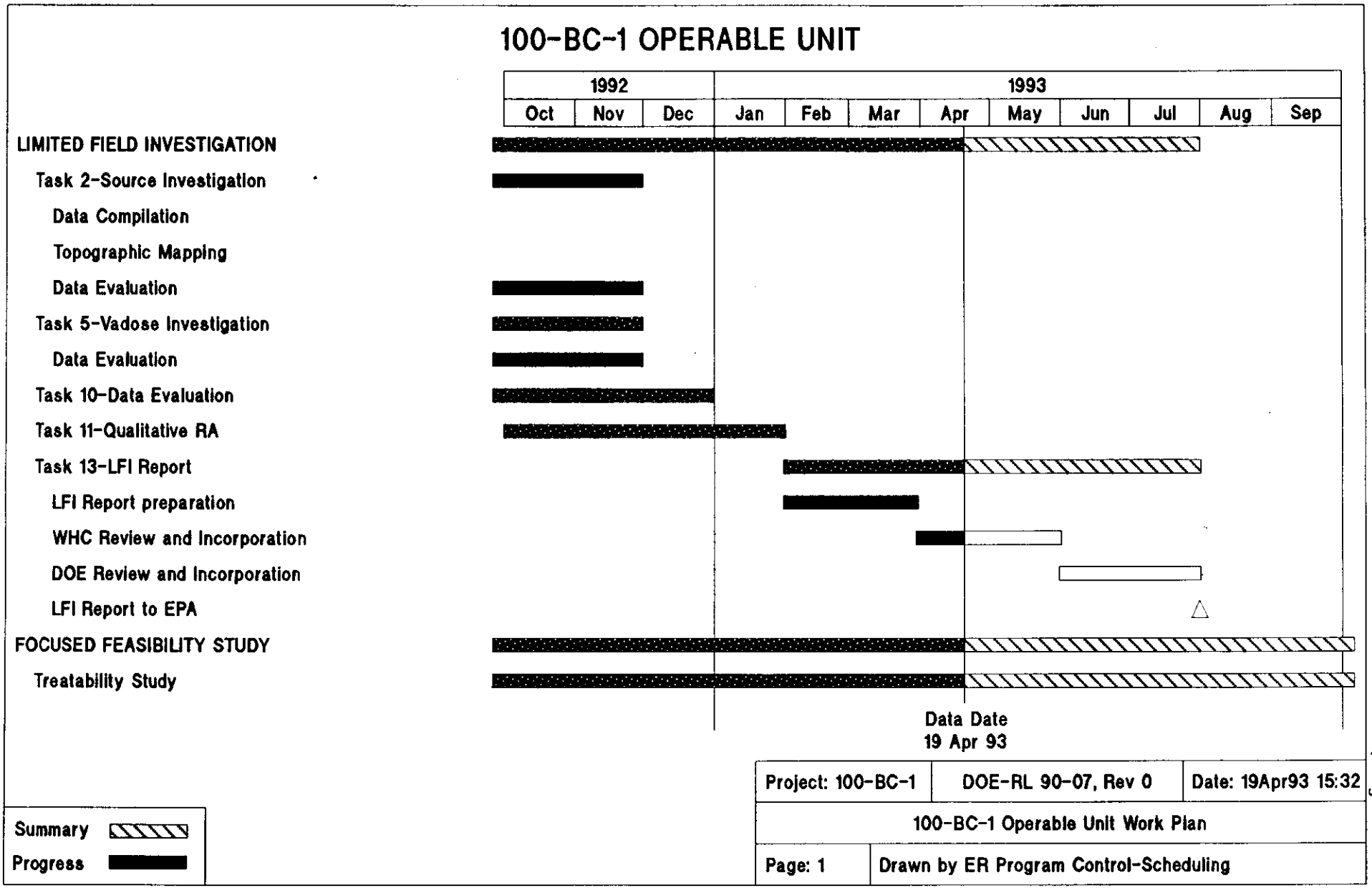
TASK 11 - QUALITATIVE RISK ASSESSMENT

The report is being reviewed by DOE/RL-HQ and comments are due back on April 23, 1993.

TASK 13 - LIMITED FIELD INVESTIGATION REPORT

The report has gone through internal WHC review and comments are being incorporated. Submittal of the document for DOE/RL review is anticipated to be at the end of May 1993.

100-BC-1 OPERABLE UNIT



Project: 100-BC-1	DOE-RL 90-07, Rev 0	Date: 19Apr93 15:32
100-BC-1 Operable Unit Work Plan		
Page: 1	Drawn by ER Program Control-Scheduling	

100-BC-5 GROUNDWATER OPERABLE UNIT
WORK SUMMARY
April 19, 1993

TASK 6 - GROUNDWATER INVESTIGATIONS

Groundwater Soil Samples:

Validation report for drilling sample data submitted December 31, 1992.

First Quarter Monitoring:

Sampling, analysis and validation is complete.
Validation report submitted December 31, 1992.

Second Quarter Monitoring:

Sampling complete.
Validation report submitted April 14, 1993.

Third Quarter Monitoring:

Sampling complete.

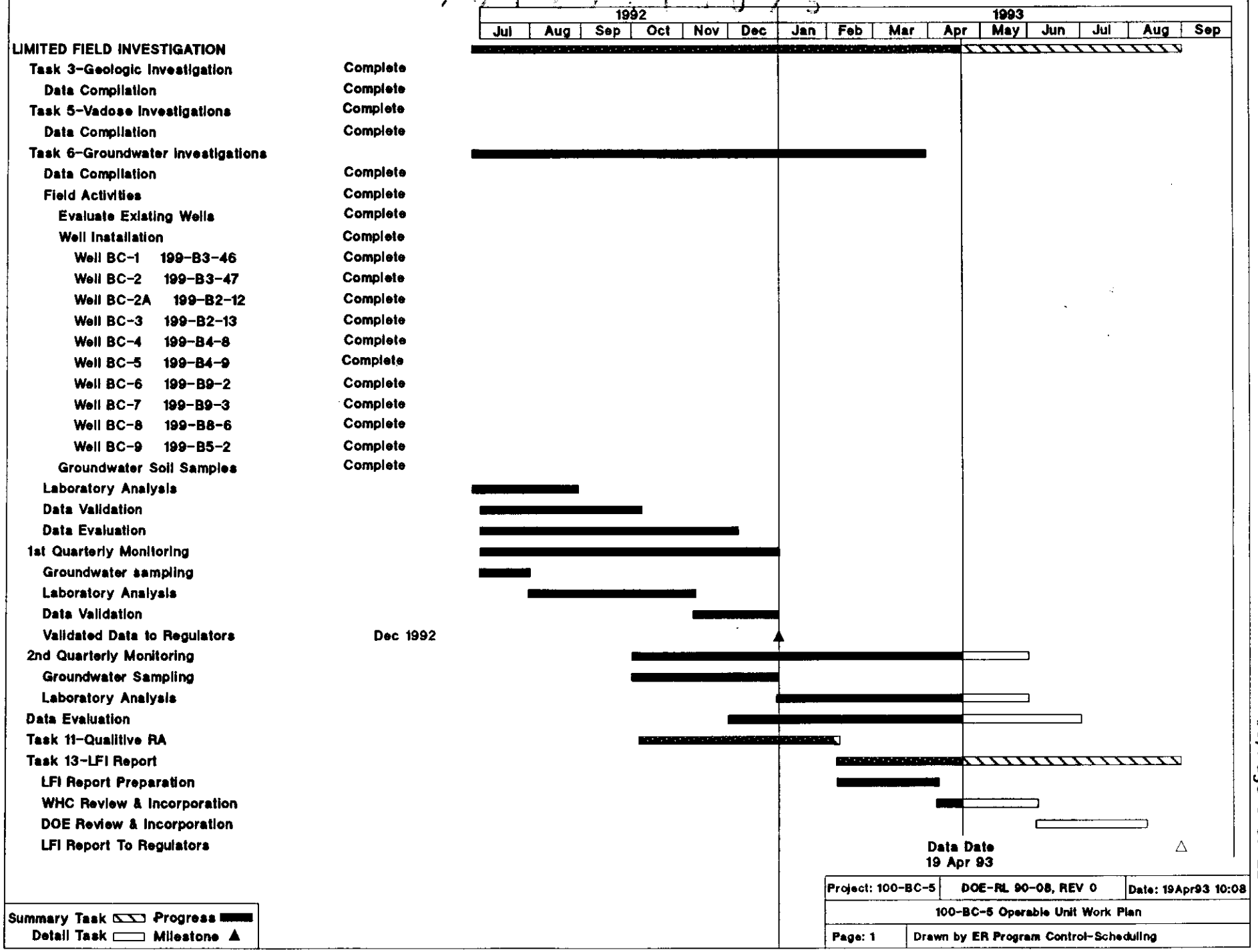
Fourth Quarter Monitoring:

Sampling in progress.

TASK 13 - LIMITED FIELD INVESTIGATION REPORT

Activities are in progress. Document is in Westinghouse internal review.

100-BC-5 OPERABLE UNIT



100-DR-1 SOURCE OPERABLE UNIT
WORK SUMMARY
April 19, 1993

TASK 2 - SOURCE INVESTIGATION

Data Validation:

Data validation reports for the Sodium Dichromate Tanks and the 1724-DA Underwater Test Facility are being submitted to DOE-RL/Regulators.

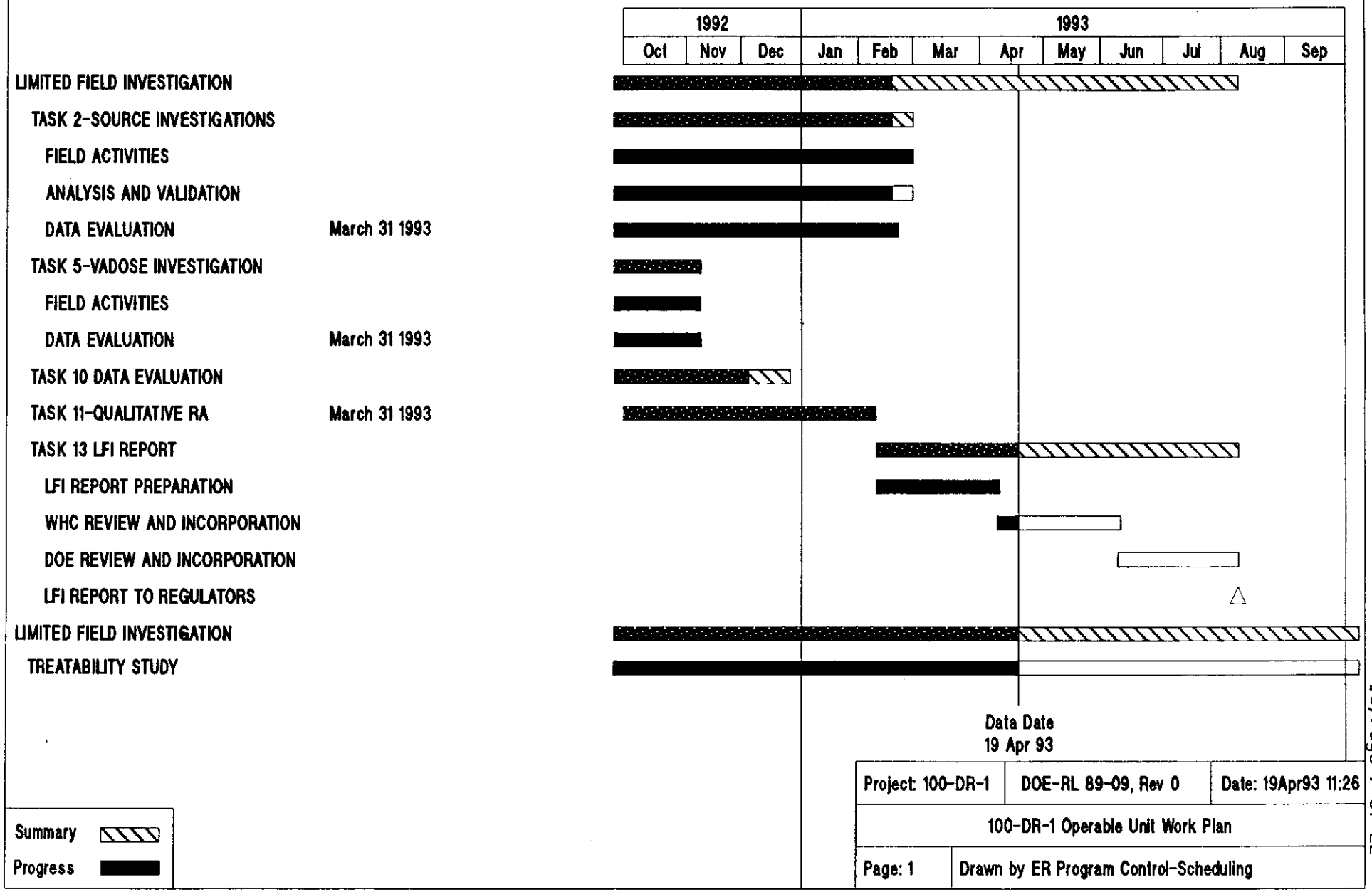
TASK 11 - QUALITATIVE RISK ASSESSMENT

SAIC/Golder has prepared the report.
It was received by WHC on March 31, 1993 and is in the process of being released through the Westinghouse Document Control System.

TASK 13 - LIMITED FIELD INVESTIGATION REPORT

IT Corporation is preparing the document. It is on schedule and due August 9, 1993.

100-DR-1 OPERABLE UNIT



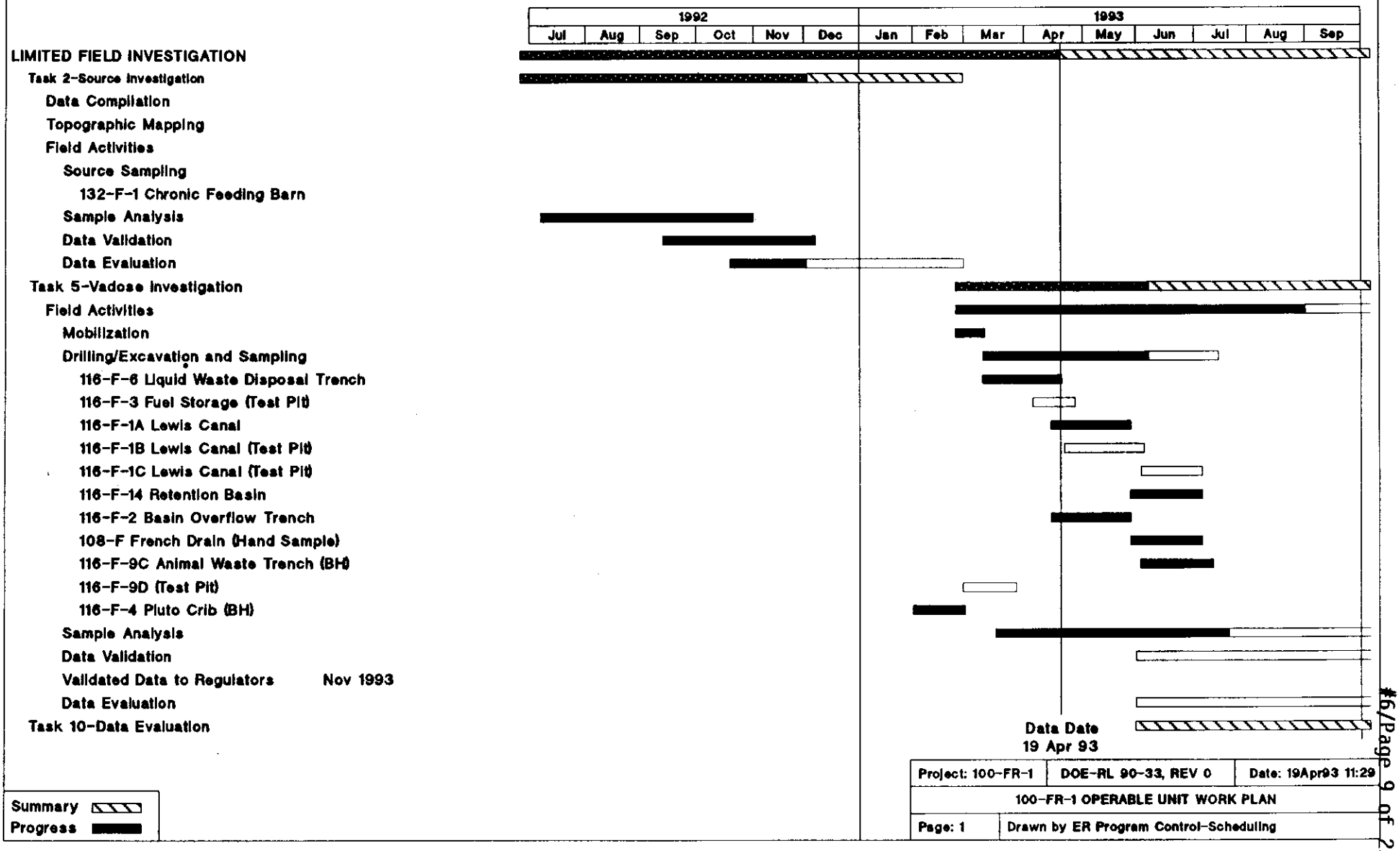
100-FR-1 SOURCE OPERABLE UNIT
WORK SUMMARY
April 19, 1993

TASK 5 - VADOSE INVESTIGATION

Drilling/Excavation and Sampling:

Excavation for four test pits (116-F-1B, 116-F-1C, 116-F-3, and 116-F-9D) is scheduled to begin on April 19, 1993. The 116-F-3 Fuel Storage Basin Trench will be excavated last because the potential for contaminating the backhoe is the greatest.

100-FR-1 OPERABLE UNIT



100-FR-3 GROUNDWATER OPERABLE UNIT
WORK SUMMARY
April 19, 1993

TASK 6 - GROUNDWATER INVESTIGATION

Groundwater Soil Samples:

Validation report for drilling sample data submitted March 12, 1993.

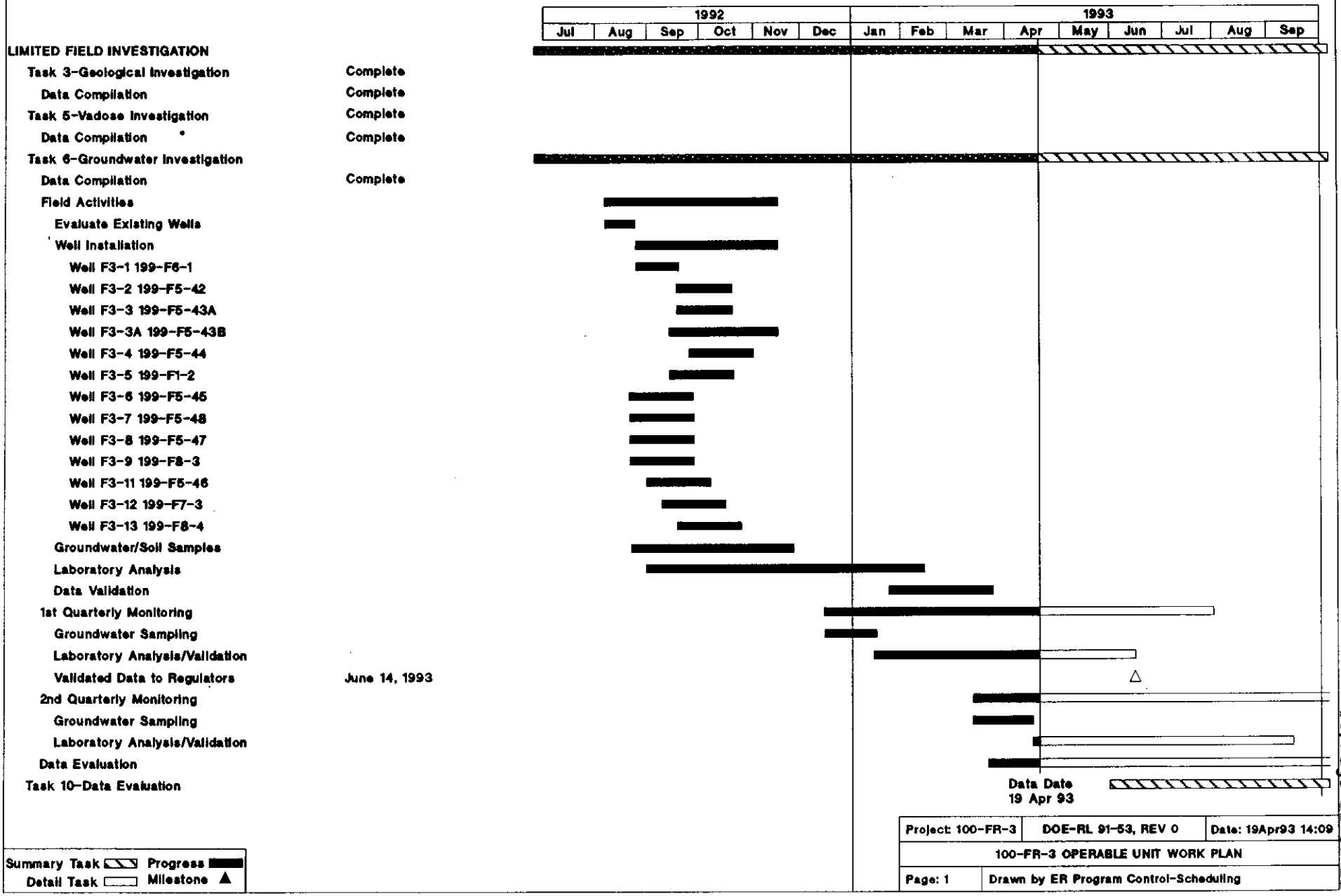
First Quarter Monitoring:

Sampling is complete.

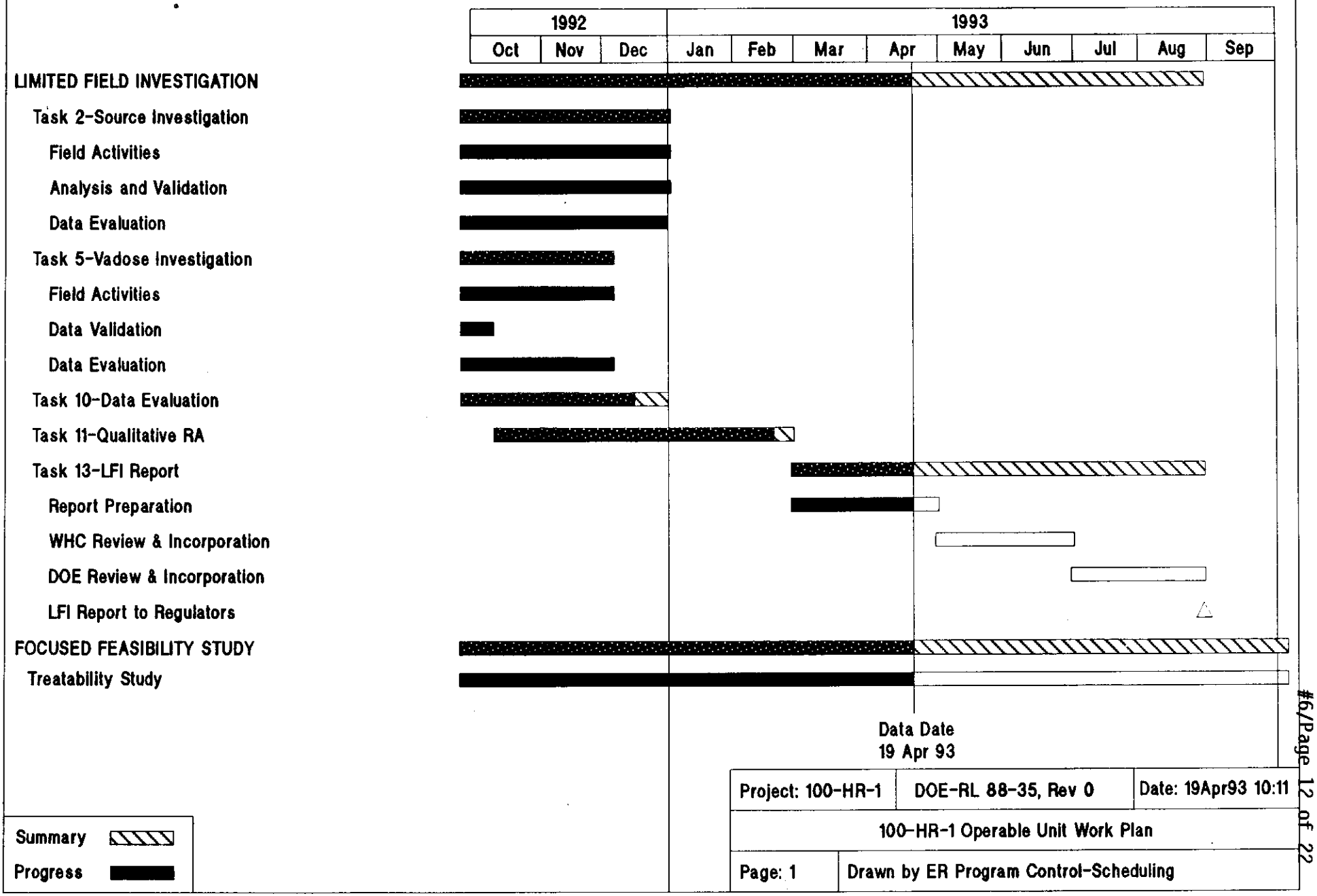
Second Quarter Monitoring:

Sampling complete.

100-FR-3 OPERABLE UNIT



100-HR-1 OPERABLE UNIT



Project: 100-HR-1	DOE-RL 88-35, Rev 0	Date: 19Apr93 10:11
100-HR-1 Operable Unit Work Plan		
Page: 1	Drawn by ER Program Control-Scheduling	

100-HR-3 GROUNDWATER OPERABLE UNIT
WORK SUMMARY
April 19, 1993

TASK 6 - GROUNDWATER INVESTIGATION

Quarterly Monitoring:

Four rounds of groundwater samples have been taken. The fifth round is scheduled for May 1993.

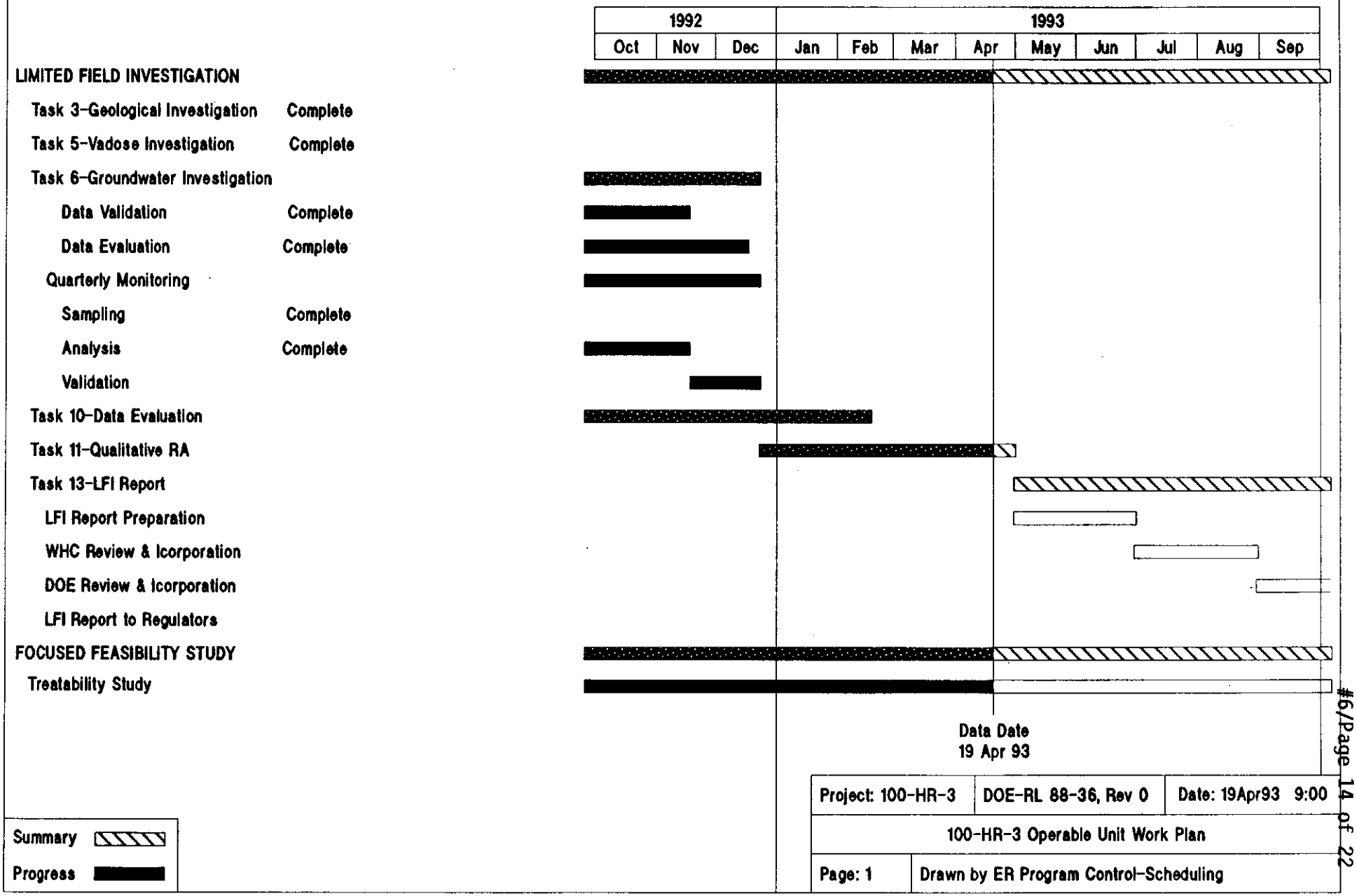
Data Validation:

First and second round groundwater data have been validated. The third round is being validated.

TASK 13 - LIMITED FIELD INVESTIGATION REPORT

The report is in progress and is scheduled for release in August, 1993.

100-HR-3 OPERABLE UNIT



100-KR-1 SOURCE OPERABLE UNIT
WORK SUMMARY
April 19, 1993

TASK 5 - VADOSE INVESTIGATION

Drilling/Excavation/Sampling:

Four vadose boreholes and four test pits were completed ahead of schedule in the October/November 1992 time frame.

Sample Analysis:

Completed in March 1993 (ahead of schedule).

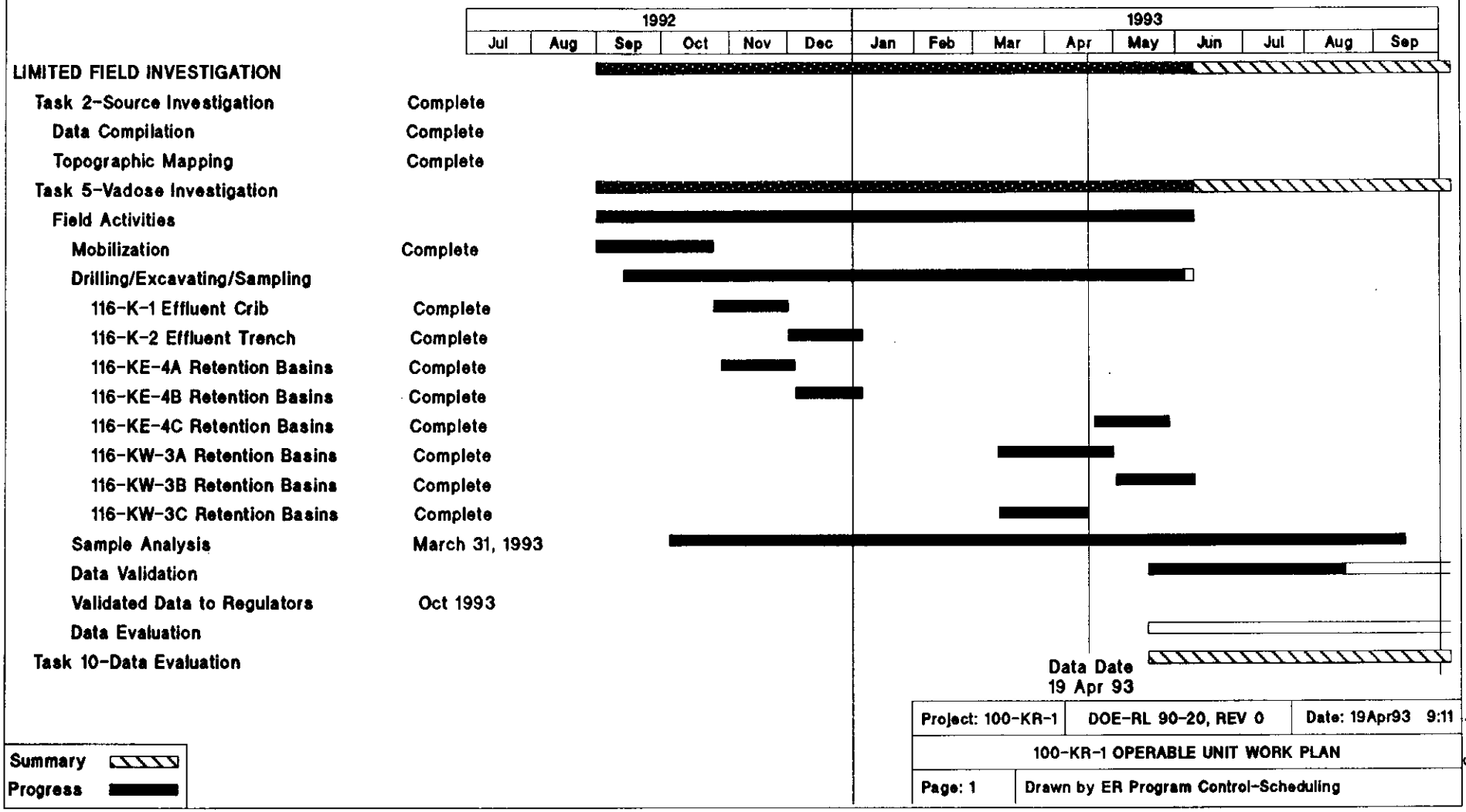
Data Validation:

Scheduled for completion in May 1993 (ahead of schedule).

Validated Data to Regulators:

Scheduled for a June 1993 delivery (ahead of schedule).

100-KR-1 OPERABLE UNIT



100-KR-4 GROUNDWATER OPERABLE UNIT
WORK SUMMARY
April 19, 1993

TASK 6 - GROUNDWATER INVESTIGATION

Groundwater Soil Samples:

Validation report for drilling sample data submitted March 12, 1993.

First Quarter Monitoring:

Sampling, analysis and validation is complete.
Validation report submitted March 12, 1993.

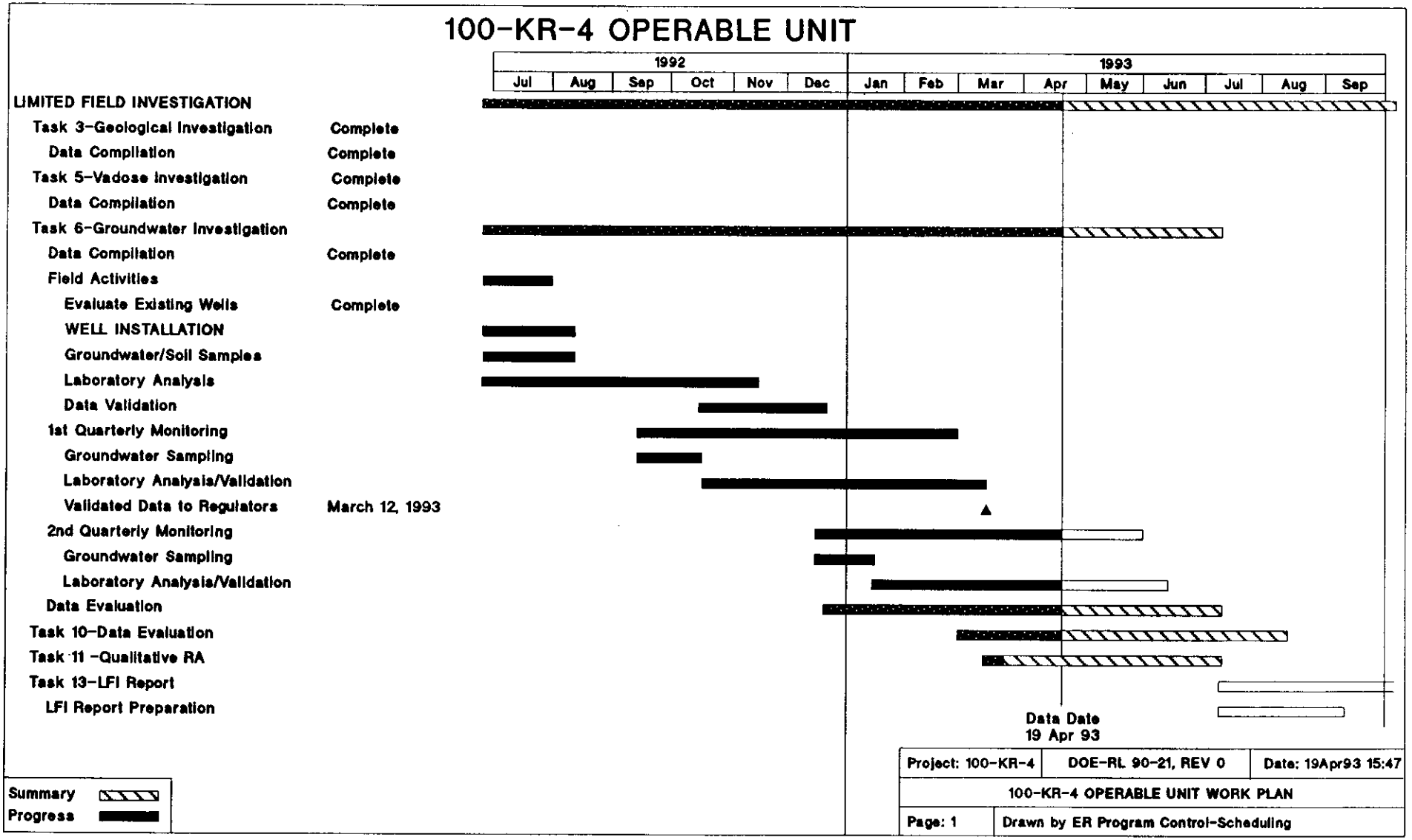
Second Quarter Monitoring:

Sampling complete.

Third Quarter Monitoring:

Sampling complete.

100-KR-4 OPERABLE UNIT



100-NR-1 SOURCE OPERABLE UNIT
WORK SUMMARY
April 19, 1993

TASK 5 - VADOSE INVESTIGATION

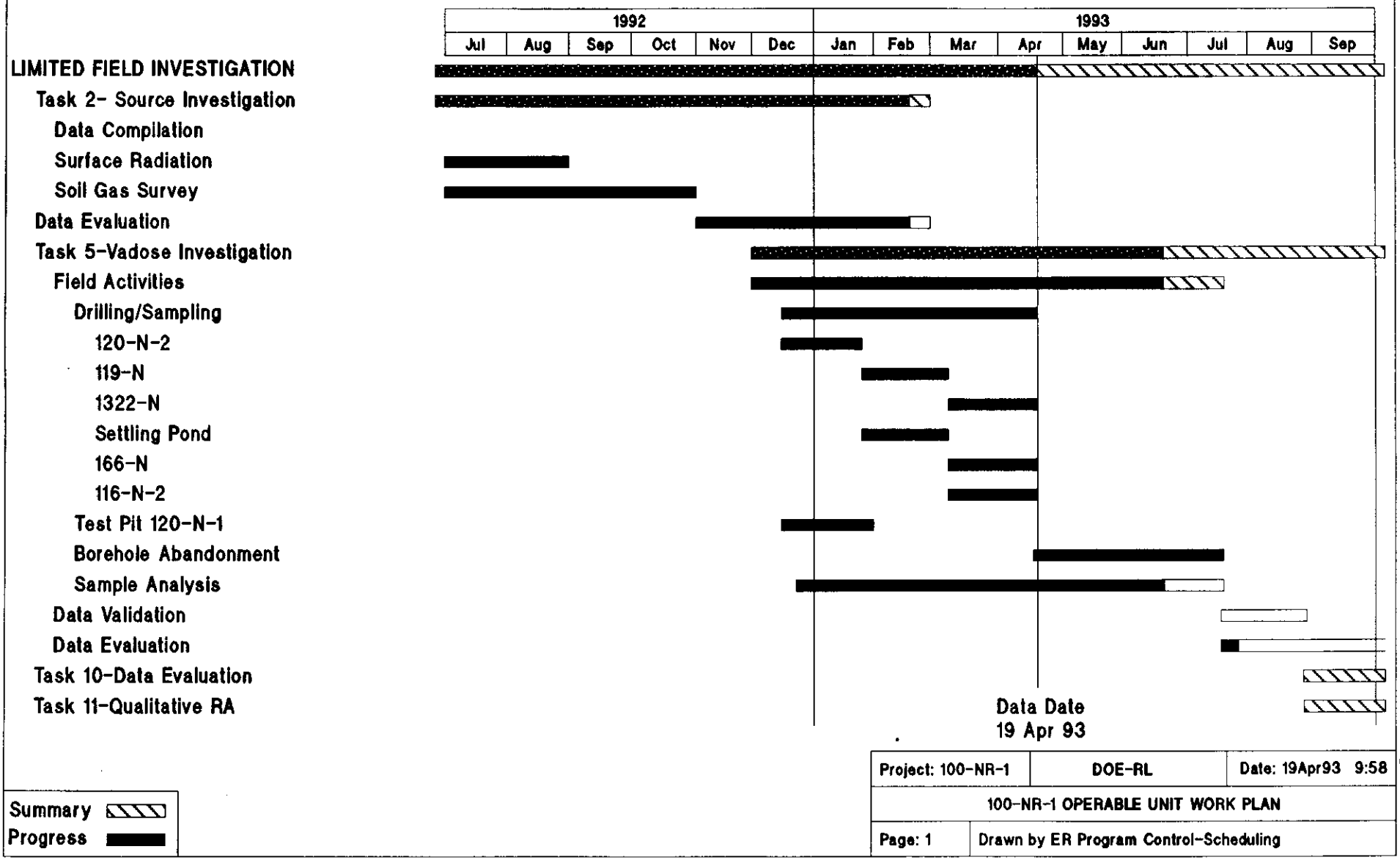
Drilling/Sampling:

The Description of Work for taking surface samples at 1322-N/NA and 116-N-2 was approved and the sampling was conducted on April 7, and 8, 1993.

Data Evaluation:

A task order was issued to IT Corporation to initiate data evaluation.

100-NR-1 OPERABLE UNIT



100 NR-2 GROUNDWATER OPERABLE UNIT
WORK SUMMARY
April 19, 1993

TASK 6 - GROUNDWATER INVESTIGATION

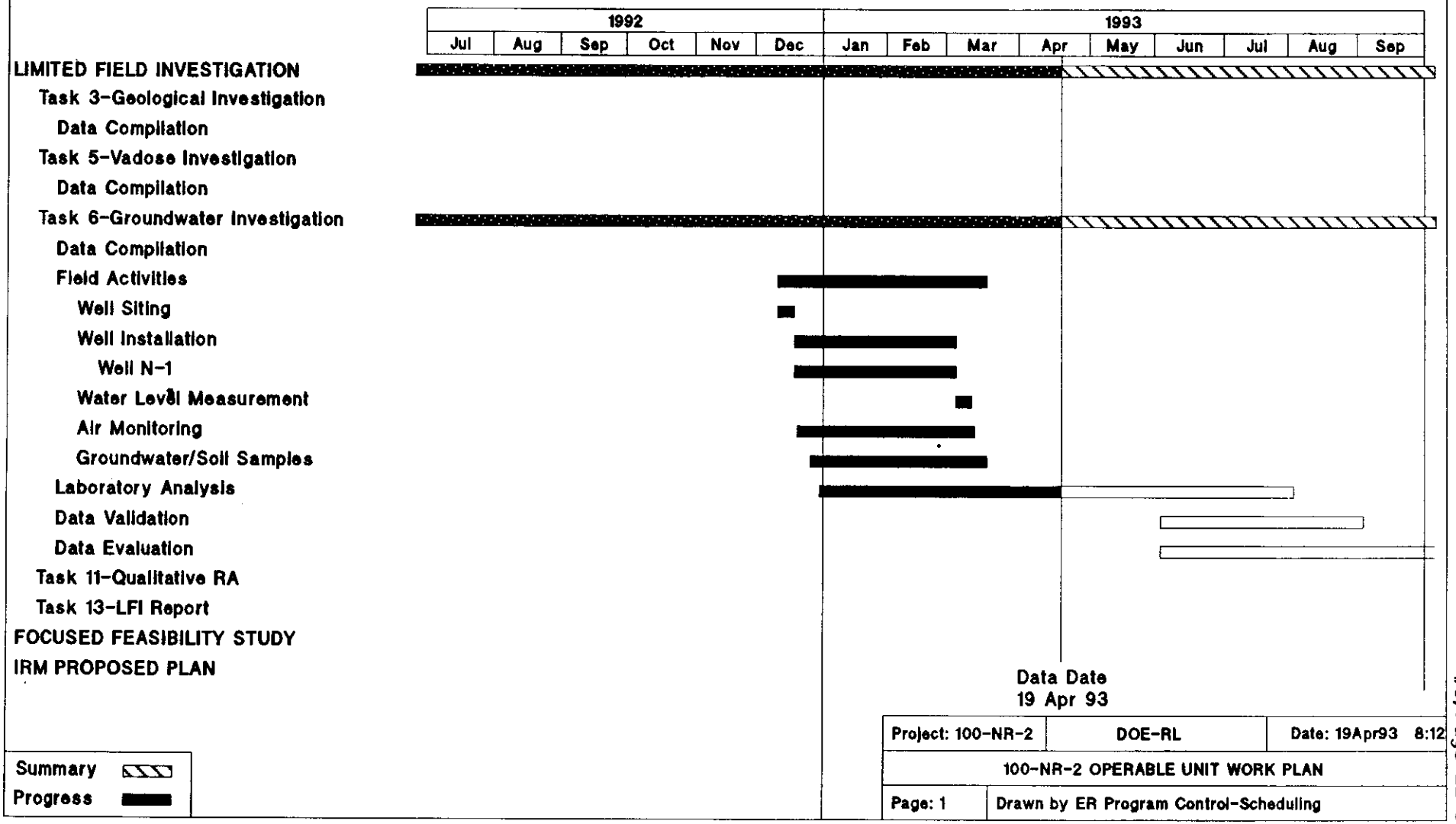
Quarterly Monitoring:

Two rounds of groundwater samples have been taken. The third round is scheduled for May 1993.

Data Validation:

The soil data has been validated.

100-NR-2 OPERABLE UNIT



PROPOSAL FOR CO-DISPOSAL TREATABILITY TEST

PRESENTED BY

WESTINGHOUSE HANFORD COMPANY
ENVIRONMENTAL RESTORATION ENGINEERING

APRIL 1993

WHAT IS CO-DISPOSAL ?

A BENEFICIAL USE SOLIDIFICATION/STABILIZATION PROCESS WHEREIN WASTE MATERIALS ARE USED TO CREATE A CEMENT OR POLYMER TO STABILIZE OTHER WASTE.

EXAMPLES:

CEMENT/POLYMER (WASTE ROCK)*	APPLICATIONS
Contaminated soils	Mixed waste landfill (ER)
Soil wash fines/process water	Mixed waste landfill (W-025)
Basin sludge	Insitu Stabilization of waste sites
Purgewater	Grout Curtains
Waste site leachate	Barriers
Groundwater	

* Soil particles or rocks < 0.5 inch are probably best for waste rock.

APPLICABILITY TO 100 AREA TREATABILITY PROGRAM

Solidification/Stabilization (eg. Cement, Polymer, Bitumin) is one of the recommended near term studies in the treatability program plan because:

- Solidification may be required for soils or sludges containing toxic metals in excess of land disposal restrictions.

- Solidification processes may be used to stabilize other waste.

- Soil washing, fines may need to be stabilized.

- Solidification studies will contribute to grout injection studies for the 100 and or 200 Areas.

Co-Disposal is a means to beneficially stabilize waste sites using waste material generated in the 100 Area, it is feasible whether land disposal restricted materials are present or not, and it meets requirements for solidification/stabilization tests identified in the treatability program plan.

EXAMPLE TREATABILITY TEST:

CONDUCT FIELD SCALE TEST USING CLEAN SOILS AND LABORATORY "WASTE FORM QUALIFICATION" TEST.

Field SCALE TEST:

- OBJECTIVE: Demonstrate system operations of a mobile mixing plant.

- USE CLEAN SOIL WASH FINES AND CLEAN WATER. FROM SOIL WASHING SET UP TEST.
- MOBILE MIXING EQUIPMENT ALREADY ONSITE

LABORATORY TEST:

- **OBJECTIVE:** Test potential waste materials to develop qualifying cement and/or polymer mixtures for stabilization.

  - Example Waste Samples to Qualify

    100-DR-1 soils — Purgewater
    100-FR-1 soils — Clean Water
    300-FF-1 soils
    200-BP-1 drill cuttings

  - Waste rock mixtures will be developed and tested for combinations of the above soils

  - Example Tests to Meet Waste Disposal Requirements
    Compressive Strength (to determine loading strength)
    Paint Filter (for residual liquids)
    Hydraulic Conductivity (permeability tests)
    Wet/Dry Cycling (to assess potential degradation)
    TCLP (if needed)

POTENTIAL OPERABLE UNIT TREATABILITY TESTS

100-HR-2
100-DR-2
100-BC-2

STATUS OF M-30-05 ACTIVITIES

EPA Comments on DOE/RL-92-64 (M-30-04)

- Additional analyses completed per comments
- Comment responses in transmittal process

Field Equipment Installations

- Continued operations at 100-B, 100-H, and 100-F Areas; conductivity probe at 100-H
- Obtained hourly data from temporary arrays at 100-K (February) and 100-D (April); 100-F Area planned for May
- Two permanent stations transferred from 300 Area to 100-K, in support of K-East Basin project and 100-KR-4 characterization

STATUS OF M-30-05 ACTIVITIES Cont.

Data Acquisition Plan for Aquifer/River Interaction

- Draft Plan covers three areas: Water level measurements, shoreline seepage, and shoreline water quality
- Satisfies need for documenting M-30-05 activities regarding "Installation of field equipment" and "Initiation of monitoring activities"
- Currently undergoing internal review

100 AREA TREATABILITY STUDY STATUS - 4/28/93

100 Area Soil Washing Treatability Test Status - PNL has completed TCLP extraction tests and preliminary characterization measurements on bulk soils from each of the test pits in the 100-BC-1 and 100-DR-1 Operable Units. TCLP extracts and bulk soil samples have been sent to the laboratory for analyses. PNL is finishing up pH and specific gravity measurements and will be measuring ion exchange capacity. Wet sieve tests are scheduled to start the week of April 26, 1993. Some preliminary test results will be presented at the unit managers meeting.

100-HR-3 Groundwater Treatability Test Status -

- Precipitation/Ion Exchange - The laboratory set up has been completed for the precipitation part of the treatability study. All the necessary apparatus is in the laboratory. The test solutions have been formulated and received. Actual testing with ferric sulfate and sodium sulfide should commence next week.

  The ion exchange columns are being fabricated at the 200 Area glass shop. The ion exchange resins are on site.

- Biodenitrification - The carbon ratio tests have been completed. The results indicate that denitrification has been achieved to less than 1ppm, well below the performance level of 45ppm. The next series will be with composite samples for pH testing.

100-HR-1 Excavation Treatability Test Status - Test plan comment resolution meeting was held April 12, 1993. All comments were resolved with exception of Ecology's comments 2, 16, and 19.

- Details were discussed with Ecology and DOE on April 20, 1993, and April 21, 1993.

- A meeting has been scheduled for April 27, 1993, to finalize the comment resolutions.

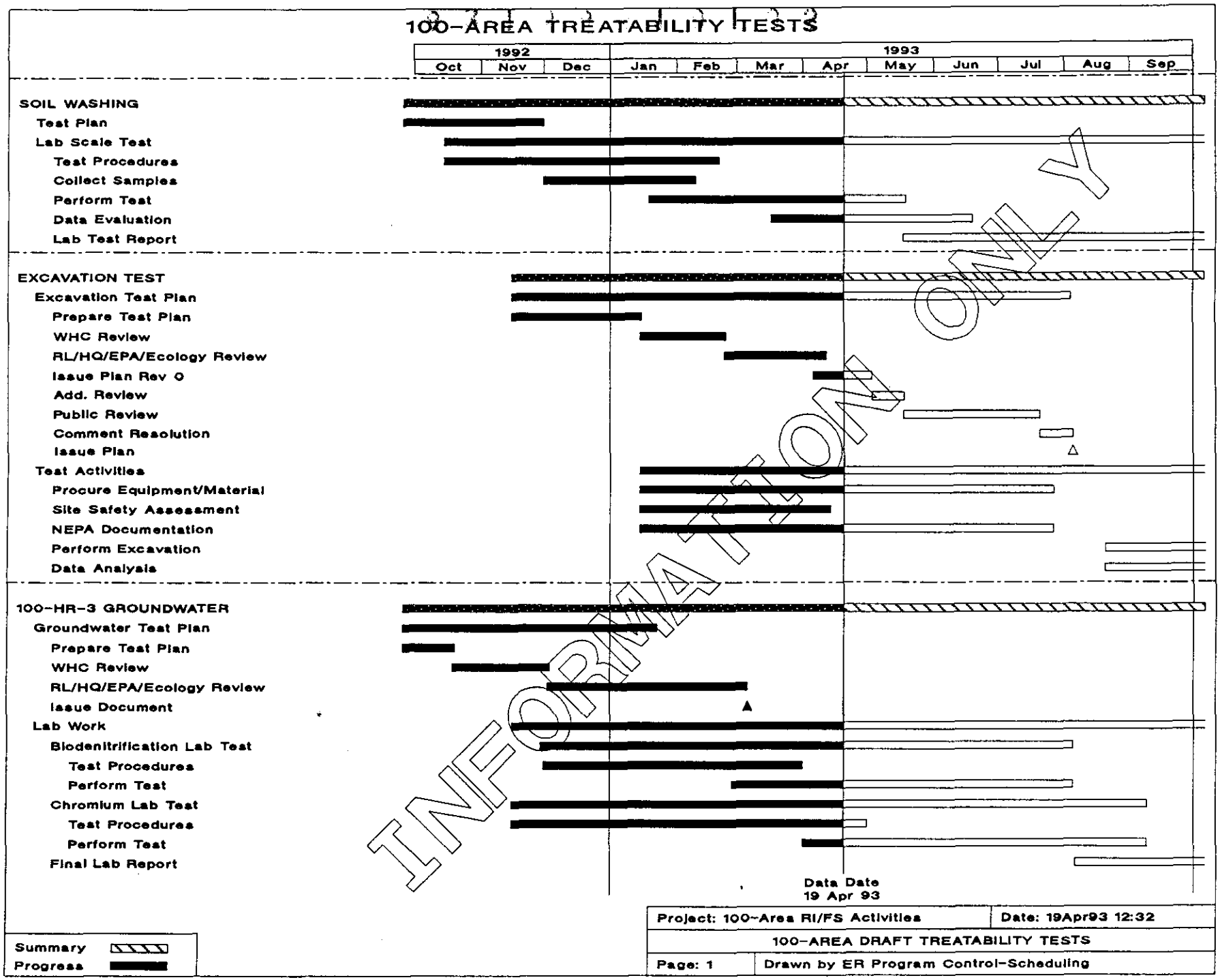
Project continues on schedule, based on following assumptions:

- Excavation at 116-F-4.

- Contaminated soil stored on-site for future treatability test, or until ROD.

- Completion of field activities signifies meeting the milestone.

NOTE: Changes to assumptions may impact schedule.


100-AREA TREATABILITY TESTS
1992
1993
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
SOIL WASHING
Test Plan
Lab Scale Test
Test Procedures
Collect Samples
Perform Test
Data Evaluation
Lab Test Report
EXCAVATION TEST
Excavation Test Plan
Prepare Test Plan
WHC Review
RL/HQ/EPA/Ecology Review
Issue Plan Rev 0
Add. Review
Public Review
Comment Resolution
Issue Plan
Test Activities
Procure Equipment/Material
Site Safety Assessment
NEPA Documentation
Perform Excavation
Data Analysis
100-HR-3 GROUNDWATER
Groundwater Test Plan
Prepare Test Plan
WHC Review
RL/HQ/EPA/Ecology Review
Issue Document
Lab Work
Biodenitrification Lab Test
Test Procedures
Perform Test
Chromium Lab Test
Test Procedures
Perform Test
Final Lab Report
Data Date
19 Apr 93
INFORMATION ONLY
Summary
Progress
Project: 100-Area RI/FS Activities
Date: 19Apr93 12:32
100-AREA DRAFT TREATABILITY TESTS
Page: 1
Drawn by ER Program Control-Scheduling

FOCUSED GROUNDWATER SAMPLING IN THE 100 AREA

By: Steven E. Vukelich

James W. Roberts

David A. Myers

April 28, 1993

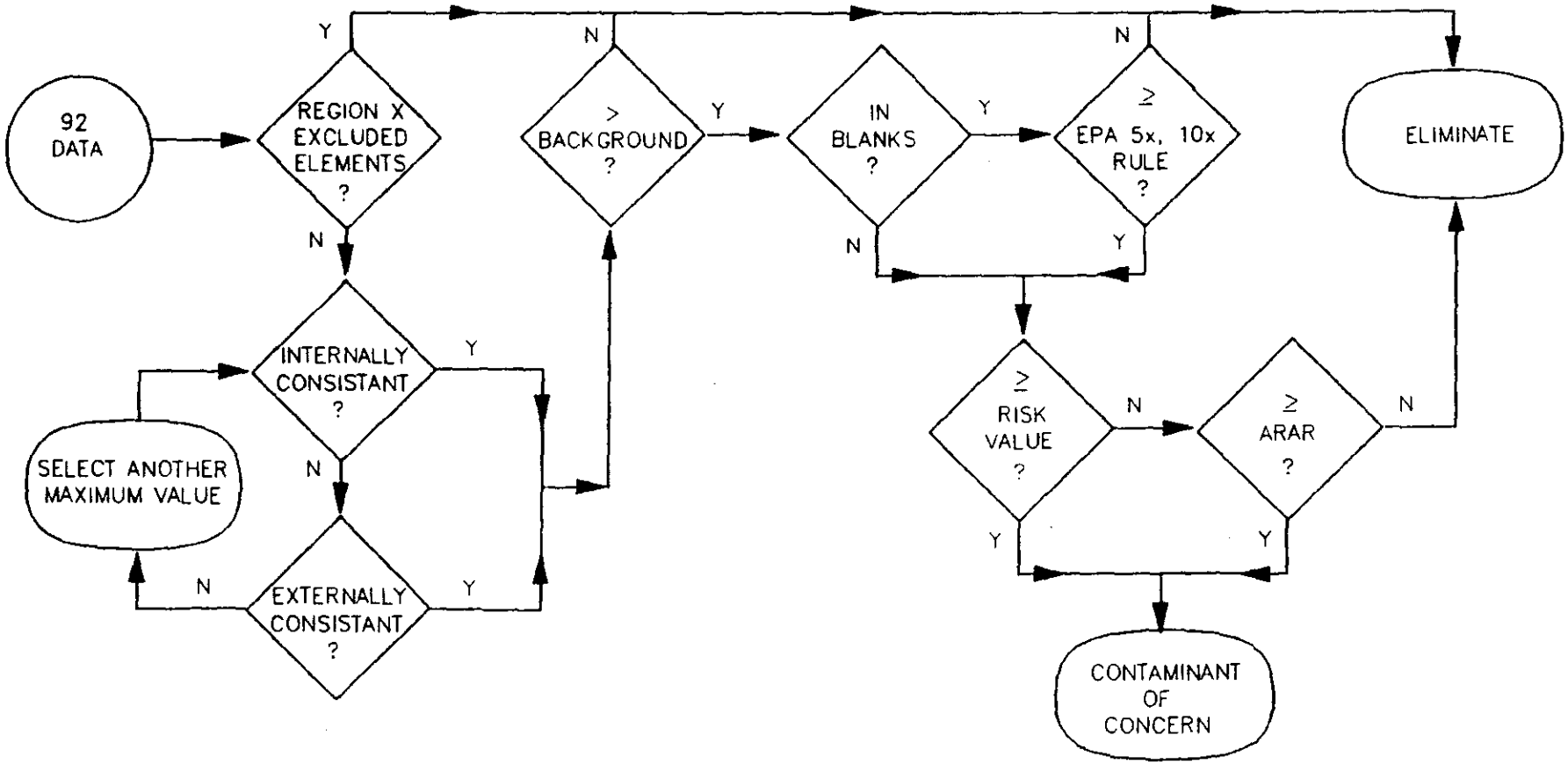
FUTURE SAMPLING SHOULD FOCUS ON IDENTIFIED CONTAMINANTS

- This Presentation:
  - Shows how contaminants are identified
  - Identifies contaminants
  - Proposes revised sample lists

SIX QUESTIONS TO IDENTIFY CONTAMINANTS

- Are analytical results consistant?
- Is the analyte toxic?
- Is the analyte a background constituent?
- Is the analyte a laboratory contaminant?
- Does the analyte pose a risk?
- Does the analyte exceed any ARAR?

CONTAMINANT IDENTIFICATION FLOW CHART



FOUR CONTAMINANTS IN THE 100 D AREA

- Chromium
- Nitrogen (Nitrates/Nitrites)
- Strontium-90
- Tritium

PROPOSED D AREA SAMPLE LIST

- Metals
- Nitrogen (Nitrates/Nitrites)
- Gross Alpha/Beta
- Strontium-90
- Tritium

FIVE CONTAMINANTS IN THE 100 H AREA

- Chromium
- Nitrogen (Nitrates/Nitrites)
- Strontium-90
- Technetium-99
- Uranium-235/238

PROPOSED H AREA SAMPLE LIST

- Metals
- Nitrogen (Nitrates/Nitrites)
- Gross Alpha/Beta
- Strontium-90
- Technetium-99
- Uranium-235/238

ONE CONTAMINANT IN THE 600 AREA

- Chromium

PROPOSED 600 AREA SAMPLE LIST

- Metals
- Nitrogen (Nitrates/Nitrites)
- Gross Alpha/Beta
- Tritium

THREE CONTAMINANTS IN THE 100 BC AREA

- Strontium-90
- Technetium-99
- Tritium

PROPOSED BC AREA SAMPLE LIST

- Metals
- Gross Alpha/Beta
- Strontium-90
- Technetium-99
- Tritium

Distribution
Unit Manager's Meeting: 100 Aggregate Area/100 Area Operable Units
April 28, 1993

Roger D. Freeberg /Julie K. Erickson /Eric Goller . . . . . DOE-RL, ERD (A5-19)
Mike Thompson . . . . . DOE-RL, EAP/RPB (A5-19)
Diane Clark . . . . . DOE-RL, TSD/SSB (A5-55)
Heather Trumble . . . . . DOE-RL, OTD/FTB (A6-55)
Steve Balone . . . . . DOE-HQ (EM-442)

Dennis Faulk . . . . . 100 Aggregate Area Manager, EPA (B5-01)
Ward Staubitz, USGS . . . . . Support to EPA
Audree DeAngeles, PRC . . . . . Support to EPA

Jack Donnelly . . . . . 100 Aggregate Area Manager, WDOE (Kennewick)
Larry Goldstein . . . . . WDOE (Lacey)

Lynn Albin . . . . . Washington Dept. of Health

Tom Wintczak, WHC . . . . . Program Manager (H6-27)
Mel Adams, WHC /A.D. Krug, WHC (H6-02) . . . . . (H6-01)
Bob Henckel, WHC . . . . . (H6-02)
L.D. Arnold, WHC . . . . . (B2-35)
Diana Sickle, WHC . . . . . (H6-27)
Chris Widrig, PNL (Please route to:) . . . . . (K1-21)
Wayne Martin, PNL . . . . . (K1-19)
Mark Hanson, PNL . . . . . (K1-51)
Roy Gephart, PNL . . . . . (K1-22)
Steve Slate, PNL . . . . . (K1-19)
Joan Keller, PNL . . . . . (K1-21)
Ben Johnson, PNL . . . . . (K1-78)

Original Sent to: ADMINISTRATIVE RECORD: 100 AAMS; Care of EDMC, WHC (H6-08)

Please inform Suzanne Clarke (376-8189) or Kay Kimmel (376-1985) of Mactec/Dames & Moore of deletions or additions to the distribution list.